

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Please cancel claims 24 to 32.

22. (Currently Amended) A catheter system for treating a blood vessel lesion within a vasculature, said catheter system including:

a vascular filter guide wire being insertable and steerable through said vasculature to a position downstream of said lesion and being in contact with said vasculature during insertion; said guide wire including a core wire and a tubular flexible shaft slidably disposed along said core wire, said shaft having a proximal portion and said core wire having a proximal portion, said catheter system including:

a catheter having a lesion treatment device; and

said guide wire being capable of directing said catheter to said lesion, said guide wire including a collapsible filter for manual deployment downstream of said catheter to trap particulate matter arising from the treatment of said lesion, said filter having a proximal end and a distal end, wherein said filter proximal end is directly connected to said guide wire shaft and said filter distal end is connected to said core wire and said manual deployment of the filter occurs based on axial movement of said guide wire core wire relative to said shaft in order to compress with a direct connection to said filter; and

a deployment mechanism including:

a base formed with a passage for confining said proximal portion of said shaft;

and

a manually rotatable control threaded element, said control element formed with a threaded hollow shank and mounted to said proximal portion of said core wire, said control element operable to threadably engage said passage and incrementally urge relative axial displacement between said shaft and said core wire to extend said filter.

23. (Currently Amended) A catheter system according to claim 22 wherein said vascular filter guide wire includes for treating a blood vessel lesion within a vasculature, said catheter system including:

a vascular filter guide wire being insertable and steerable through said vasculature to a position downstream of said lesion and being in contact with said vasculature during insertion, said guide wire including a core wire and a tubular flexible shaft slidably disposed along said core wire, said shaft having a proximal portion and said core wire having a proximal portion, said catheter system including:

a catheter having a lesion treatment device;

an elongated flexible core wire having a proximal end and a distal end and being insertable and steerable through a patient's vasculature to a position downstream of said lesion;

a tubular flexible shaft slidably disposed along said core wire, said shaft including a proximal portion and a distal portion disposed inwardly from said core wire distal end for placement downstream of said lesion; and

said collapsible filter coupled at one end directly to said shaft and at its other end directly to said core wire, said collapsible filter operable in response to relative displacement between said

~~shaft and said core wire to radially extend outwardly within said vasculature and trap particulate matter arising from the treatment of said lesion~~

said guide wire being capable of directing said catheter to said lesion, said guide wire including a collapsible filter for manual deployment downstream of said catheter to trap particulate matter arising from the treatment of said lesion, said filter having a proximal end and a distal end, wherein said filter proximal end is connected to said shaft and said filter distal end is connected to said core wire and said manual deployment of the filter occurs based on axial movement of said core wire relative to said shaft in order to compress said filter; and

a cylindrical support cage having a closed distal end and a flared proximal end, said distal end fixed to said core wire and said proximal end extending axially and mounted to said shaft.